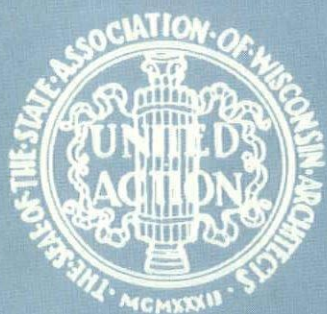
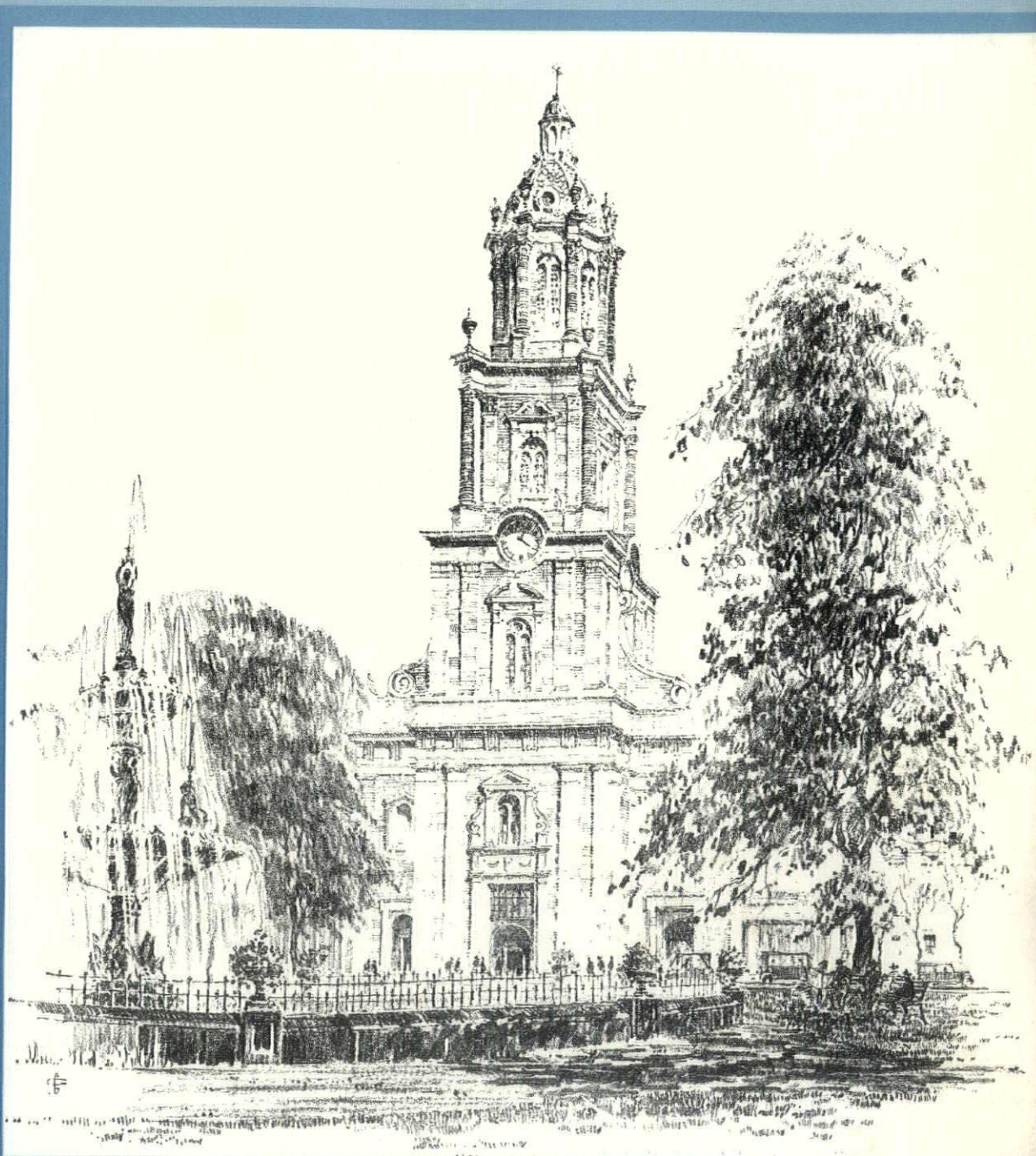


341



# THE WISCONSIN ARCHITECT



NOVEMBER  
1939  
Vol. 7 No. 11



## THE WISCONSIN ARCHITECT

Official Publication

The State Association of Wisconsin  
Architects

Wisconsin Chapter, The American  
Institute of Architects

LEIGH HUNT, *Editor*

152 W. Wisconsin Ave., Milwaukee

GREGORY G. LEFEBVRE, *Assistant Editor*

EDWIN R. CRAMER, *Publisher*

724 E. Mason St., Milwaukee

Published Monthly

Subscription, \$1.00 per year

Address all communications for publication  
to Editor at 152 W. Wisconsin Ave.,  
Milwaukee

### CONTRIBUTING EDITORS

PETER BRUST

HERMAN BUEMMING

### OFFICERS

William Mickelsen ..... President  
Walter Memmler ..... 1st Vice-president  
Emiel F. Klingler ..... 2nd Vice-president  
Gregory Lefebvre ..... Treasurer  
Arthur L. Seidenschwartz ..... Secretary

### EXECUTIVE BOARD

Districts Nos. 1 and 2

Emiel F. Klingler ..... Amery

District No. 3

Noel R. Safford ..... Green Bay

William A. Oppenhamer ..... Green Bay

District No. 4

C. Madsen ..... Stevens Point

District No. 5

Wallace Brown ..... Oshkosh

Henry Auler ..... Oshkosh

District No. 6

B. H. Knobla ..... Madison

District No. 7

Gregory Lefebvre ..... Milwaukee

Gerrit DeGelleke ..... Milwaukee

Urban Peacock ..... Milwaukee

Leigh Hunt ..... Milwaukee

Arthur L. Seidenschwartz ..... Milwaukee

District No. 8

William Mickelsen ..... Racine

Robert S. Chase ..... Janesville

### OFFICERS AND DIRECTORS OF THE WISCONSIN CHAPTER OF THE A.I.A.

#### OFFICERS

Alexander H. Bauer ..... President  
Carl Eschweiler ..... Vice-President  
Leigh Hunt ..... Sec.-Treasurer

Directors in addition to Officers:

Edwin Kuenzli  
Richard Philipp  
Ralph Kloppenburg  
S. Sutherland

Cover: *St. John's Cathedral*  
Milwaukee, Wisconsin

## Eighth Annual Convention of the State Association of Wisconsin Architects

The eighth annual convention of the State Association of Wisconsin Architects was held at the Hotel Plankinton, Milwaukee, Wisconsin, on October 27 and 28, 1939.

The convention was called to order by President Leigh Hunt at 10:45 A.M. He introduced Mr. Ott of the Milwaukee Chamber of Commerce, who delivered the address of welcome.

President Leigh Hunt made the following address to the Convention.

"Continuing a custom inaugurated last year, I shall make some comments on the condition and outlook of our profession and a few suggestions.

"In recent years a fine spirit of neighborliness with the architects in the states surrounding us has developed and through these contacts these same states are working together with us for unification of the architectural profession in our territory.

"As architects we must always place foremost our obligations to our clients. The registration of our profession was conceived primarily for the protection of the building public by examining those who wish to practice architecture, and thereby instilling confidence in our ability. The existing registration laws are not all they should be and an organized effort should be made to strengthen them to better protect our clients who do not know how our services safeguard their interest both financially and artistically.

"We are rapidly becoming conscious of the need for intelligent cooperation with the construction industry. Its members look to us for leadership. Let us furnish it.

"Much has been printed about the high cost of building and investigations are under way to ascertain if this is true.

"Are we taking advantage of the multiplicity of new materials available in an attempt at solving this problem?

"Various publications in our country are offering plans for houses at the cost of printing. Is this so-called home service taking the place of architectural services? We know it does not, for each building problem is a personalized service — one which the capable, trained architect can solve due to his education and continual research — and their research done in cooperation with the construction industry is indispensable in the production of good architecture.

"The Producers Council Club of Wisconsin has been cooperating with the State Association and a fine spirit of understanding has resulted. I offer my thanks to this group for its assistance and usefulness to our profession.

"The small house has been given much publicity during recent years. The greater majority of this class of building has been done by others than ourselves but not without the assistance of our profession, for it has trained most of the men who have been responsible for the improvement in this type of residential work and to our own profession should go the credit for this improvement.

"The architect can do this work better and by active participation we can show that we are indispensable in the production of good architecture.

"Advertising is imperative in this age, a fact our profession has been slow to recognize. Your association has been running one column, 28 line ads in the Sunday Journal and Sentinel for several months with gratifying results. This type of advertising has also been used in several other states with success. I urge you to send in your check for your share of the cost. We must keep the name of the architect before the public. It pays.



"Architectural education is divided into two activities or classifications: the student and the public.

"Education is free but compulsory for our children. Art is being taught in the primary grades with fine results. Art education continues through high school and college and in many art schools. Our artists have been recognized for their work throughout the world.

"Architecture is not taught in Wisconsin, therefore our children are obliged to go into other states for instruction. This situation may account in no small way for the need of extra effort on our part to educate the public in architectural appreciation.

"Through the untiring efforts of Mr. Carl Eschweiler the Atalier Eschweiler is still going strong. Their classes are larger and recently an instructor, Dr. Escher, was added.

"I urge you all to encourage your draftsmen to attend these classes. From this Atalier Mr. Eschweiler hopes to develop a school of architecture for our Wisconsin men. Improve your men and you will benefit.

"The public has shown great interest in plans and pictures of houses little realizing that this pictorial display means little. It is our duty to educate our public in a better understanding of our profession — what comprises our services. This is a large order but it must be filled before the architects' work can become a service which will be demanded by those about to build.

"The recent exhibition of contemporary architecture held at the Milwaukee Art Institute during September is now touring the state. This exhibition, state wide in character, attracted large numbers and will be made an annual affair hereafter.

"Mr. Harry Bogner and his committee deserve a vote of thanks for their work. The united action of the profession in contributing to this exhibition cannot help but raise the esteem which the public holds for our profession.

"Our profession should devote a goodly portion of its time to public service. Interest in architecture and the architect can be stimulated greatly by our interest in public life. Our profession should be represented on all government and state organizations and committees. This effort may seem a burden but it will reap rewards in public recognition.

"I am of the opinion that we should have a committee on Public Emergency, the functions of which would include such activities as would promote the profession and anticipate our position in local affairs. This committee should be available at all times to cope with emergencies.

"I wish to thank my fellow officers and committee members who, during my two years in office, have done such fine work, for without their cooperation the little which I have done would have been lost."

After the completion of the address by President Leigh Hunt, reports of committees were called for.

**TREASURER'S REPORT:** Treasurer Gregory L. Lefebvre submitted his report of receipts and dis-

bursements during the year which are made a part of these minutes. A brief outline is as follows:

Cash Bal. as of Sept. 22, 1938	\$ 515.56
Cash Receipts	
171 Membership Dues 1939 at \$5.00	\$ 855.00
1 Membership Dues 1940 at \$5.00	5.00
Miscellaneous Income as per attached itemized statement	888.86
	\$1,748.86
<b>TOTAL</b>	<b>\$2,264.42</b>
Cash Disbursements	
As per itemized statement attached	\$1,756.53
Bank Service Charges	5.92
<b>TOTAL</b>	<b>1,762.45</b>
<b>BANK BALANCE</b>	<b>\$ 501.97</b>

Treasurer's report was accepted and approved and made a part of the minutes.

Upon the completion of the Treasurer's report the meeting was adjourned and lunch was served in the Sky Room of the hotel.

After lunch, a very enjoyable, instructive and illustrative lecture was given by Mr. Engelhardt of the Wisconsin Electric Power Company on the "Miracles of Light."

On the completion of this lecture, the meeting was again called to order at 2:30 P.M. by President Hunt, and the following reports were read.

**SECRETARY'S REPORT:** Secretary Arthur L. Seidenschwartz read a resume of the activities of the Executive Board of the State Association for the past year. It was accepted and approved, and was made a part of the minutes of the convention.

Mr. Mickelsen, chairman of the practice committee made the following report.

Mr. President and Gentlemen:

Your Practice Committee reports as follows:

During our past fiscal year this Committee has dealt with a considerable number of routine cases and miscellaneous matters pertaining to the conduct of Architectural practice throughout the State.

A number of complaints relative to infractions of both the Registration Law and our adopted Code of Ethics were submitted to this Committee and whenever possible direct action was taken. In a number of cases action was not possible for various reasons.

Your Practice Committee has maintained such contact as was necessary with our State Board of Examiners from whom excellent support has been had.

On April 29th of this year our Committee held a Special meeting at the Plankinton Hotel together with officers of the Executive Board for the purpose of hearing a number of cases concerning major offenses. This hearing consumed the greater part of one day and was very well attended.

(Continued on page 4)



On July 21st of this year a meeting was held together with the Building Department Commissioners of the Industrial Commission at the Industrial Commission offices in Madison. A number of problems were discussed with the Industrial Commission at this meeting such as the illegal sealing of plans, practice throughout the state by non-registered architects from other states, engineers of various classifications doing architectural work, architectural departments in various municipalities being conducted by non-registered men, and the feasibility of obtaining better cooperation on Registration Law enforcement from Building Departments and other authorities of Municipalities throughout the state. Attendance at this meeting was excellent and we feel that some very definite good was accomplished in arriving at a better understanding with the Industrial Commission.

A review of the work of your Practice Committee for the past year would indicate that there has been a definite improvement in general practice throughout Wisconsin as compared with past years. However, there are as yet too many violations of our Registration Law, the major one of which is the practice of Municipalities in conducting Architectural Departments, particularly for execution of WPA projects, without the service of a Registered Architect in private practice.

Another serious violation is the practice of out of state Architects not registered in Wisconsin soliciting work in the residential field as architects. While registration is not required in the performance of residential work the illegal use of the title "architect" enables these men to obtain a marked volume of desirable residential work.

Both of the violations mentioned have resulted in serious loss to the Registered Architects of Wisconsin to whom this work would normally go and this Committee is hopeful that ways and means will be found during the coming year to combat these conditions.

A practice of the architects registered in Wisconsin that has been most harmful to the high standards for which our Association stands is the cutting of fees below our established minimums.

Almost invariably the fee cutting has been in competition and, though not always successful, has resulted in establishing a dangerous precedent. Obviously proper services cannot be rendered at cut fees and the consequent lowering of standards of service rendered in such cases is detrimental to the profession as a whole. Competition on a fee basis for professional services is obviously detrimental.

The Practice Committee recommends to all members of the Association that they become active with their District Groups and discuss all of these problems thoroughly for the purpose of devising ways and means of discouraging such practices. We are of the opinion that our close association throughout the State will definitely result in general improvement of architectural practice which will in turn prove to be of direct benefit to each individual member of this Association.

Respectfully submitted,

WILLIAM MICKELSEN, *Chairman,*  
*Practice Committee*

A motion was made and seconded that the report of the Practice Committee be accepted as read. Motion was adopted.

**MEMBERSHIP COMMITTEE** report: Mr. Frank Stepnoski, chairman of the Membership Committee reported that the collections for the year of 1939 was not as high as the previous year. He stated that the collection of dues depends greatly upon the interest of the members in the association work. He was of opinion that 1940 will be a good year.

President Hunt then introduced Mr. Alex Bauer, president of the Wisconsin Chapter of the A.I.A. Mr. Bauer said:

"I was particularly gratified in listening to the work of the convention — especially the report by Mr. Mickelsen of the Practice Committee. As you know, the A.I.A. convention held in Washington in September in collaboration with the International Congress which comprises the architects from all over the world was changed at the last minute due to conditions in Europe. About 27 architects were on the high seas at the time and made it necessary to eliminate this part of the convention.

"One of the major necessities that confronts the architects today is the need of devoting more time to the business side of his profession in addition to the cultural. I am pleased to see that you architects take the time from your business to come to work together and to help one another. It is only through such societies as this that the State Associations have been able to accomplish so much.

"Mr. Hunt has done much good work all over the country as State Association Director. I think we should be grateful and thankful that a man from Wisconsin has done so much to unify the profession of architecture in our country.

"I would like to leave this thought with my fellow architects. The A.I.A. and the Wisconsin Chapter are not highbrow organizations, and invite those that are so inclined to make application for membership. We would be glad to have you join with us also."

**CONSTRUCTION INDUSTRIES ADVISORY COUNCIL:** Mr. Seidenschwartz, chairman, made the following report:

There is very little to report for the Construction Industries Advisory Council this year. Last year this advisory council was formed in order to bring more money into Wisconsin for P.W.A. work. This particular council is comprised of the secretaries of all associations connected with the building industry in Wisconsin.

Much work was done. This council was able to bring about the allocating of considerable money from P.W.A. It was impossible for them to change the set-up, but I will say this for the officers of the council. They are keeping their ears to the ground and watching everything that transpires.

**LEGISLATIVE COMMITTEE:** Mr. B. H. Knobla made the following report:



Mr. President and Gentlemen:

Your Legislative Committee reports as follows:

The Committee has checked the Legislative Calendar from week to week during the legislative session to determine what bills were being proposed which would affect the best interest of architects.

Several hearings were attended at which ballots were cast as instructed by the Executive Board.

The bills which received the particular attention of your Committee were:

- A. Several bills which were being promoted by labor groups attempting to increase unemployment compensation which would result in increased cost of building.
- B. The committee recommended to the Executive Board the endorsement of several bills sponsored by the Building Trades Employers Association seeking relief from the abuses contained in the present Unemployment Insurance Act.
- C. The bill advocating a tax of  $\frac{1}{4}$ c per gallon on fuel oil would have increased both domestic and industrial costs and likewise the manufacture and sale of oil burning equipment, which we were prepared to oppose.
- D. A bill was introduced attempting to reduce real estate taxes, which we were prepared to support.

All of the above bills were defeated in committee hearings, except one on increasing unemployment compensation which eventually was indefinitely postponed and has not been revived.

Respectfully submitted,

ELLIS J. POTTER, *Chairman*  
B. H. KNOBLA, *Vice Chairman*

During the past year five architects were called to the "Great Beyond." The Secretary was instructed to write letters of condolence to the families of the deceased.

There being no further reports ready, a general discussion followed on the advisability of inviting the ladies to the annual convention. Considerable discussion on this question followed and many expressed themselves in favor of the suggestion. It was moved and seconded that the incoming Executive Board give this consideration. Motion carried.

A letter received from the President of the Minnesota Association of Architects was read expressing good wishes and success.

Mr. Hunt made reference to his travels as the A.I.A. representative of the State Associations stating that he visited 41 cities in 24 states, that at present time there are 27 state associations in the United States. He believes that the State Associations are definitely doing something to bring about a proper unification of the profession of architecture.

Mr. Memmler, a practicing architect of Berkeley, California, who was a guest at our convention, made the following remarks.

"I always feel at home in Wisconsin. That is the real reason I am attending your convention.

"I wish we had better cooperation between the A.I.A. and the State Association in California, but eventually that will be changed in my opinion. There has been much work done in the way of changing our registration in California and I believe that the errors that have been committed in the past will be profitable to us. We were the second state in the Union that had an architectural practice act — Illinois was first. We should really lead in the standards of our laws. I think that is going to be brought about within the next few years.

"I have enjoyed being a guest of your convention."

Mr. Seidenschwartz was called upon to make a report relative to the case of Charles Wurm against the Rowinski Engineering Company of Rhinelander.

Mr. Seidenschwartz's report brought out the fact that the architect should guard his registration in the State of Wisconsin, carefully, as infractions of the law may put him in a very precarious position with the possibility of losing his registration and livelihood as an architect.

This particular point was brought out very forcibly by the decision handed down by the judge hearing the case.

There being no further business to come before the afternoon session, meeting was adjourned at 4:30 P.M. to give the members as much time as possible to view the exhibit of the Producers Council Club of Wisconsin and other exhibitors at the convention.

October 28, 1939

The convention was called to order by President Leigh Hunt at 10:00 A.M.

As the Resolutions Committee was not quite ready to report the resolutions there was a general discussion on ways and means to create more interest so as to increase the attendance at conventions. Several schemes were suggested, all with merit, and a further study was suggested to the Executive Board.

Mr. Herbert Ebling, chairman of the Resolutions Committee, presented the following resolutions for adoption.

Your committee on resolutions recommends that the following resolution be adopted.

#### Resolution No. 1

To the Wisconsin Members of the Congress of the United States:

We the State Association of Wisconsin Architects in convention assembled this twenty-eighth day of October, 1939, realizing the perplexed situation that exists in a number of communities in the State of Wisconsin by reason of the discontinuance of P.W.A., and recognizing the necessity of alleviating these conditions, bring the following resolution to your attention.

WHEREAS, the P.W.A. has ceased to award further grants, and

WHEREAS, many communities in the State of Wisconsin have passed bond issues and have had plans and specifications prepared for any necessary public improvements, and

WHEREAS, the P.W.A. projects have materially assisted in the solving of the unemployment situation,

(Continued on page 6)



THEREFORE, BE IT RESOLVED, that the State Association of Wisconsin Architects respectfully request your earnest consideration of ways and means to make necessary funds available to these communities for the completion of such project.

Upon motion made by Mr. Ebling and seconded by Mr. Memmler, the motion was adopted.

#### Resolution No. 2

State of Wisconsin Banking Commission:

WHEREAS, your commission appoints appraisers to value and establish mortgage loans for residential building construction, rating these values for banks and loan institutions from drawings and specifications presented by the building professions and prospective home owners, and

WHEREAS, the value of good construction and beauty of architectural design is of utmost importance for sound appraising, and

WHEREAS, the building public should have the protection of an appraisal committee composed of those best qualified to make such appraisal, and in our opinion there is no professional man better qualified than an architect for the services, and

WHEREAS, the value of an architect's services on any such committee is recognized by the governmental agencies dealing in similar matters; and

THEREFORE, BE IT RESOLVED, that we, the State Association of Wisconsin Architects, recommend to you the appointment of architects as appraisers, at least one to each committee in the State of Wisconsin.

Upon motion made by Mr. Ebling and seconded by Mr. Brust, the motion was adopted.

#### Resolution No. 3

WHEREAS, the State Association of Wisconsin Architects recognizes the need of bringing the scope of Architectural practice to a greater degree to the house building industry and particularly the small home, and

WHEREAS, this part of the building industry gives evidence of forming a larger share of the entire building industry for years to come, and

WHEREAS, the architect has been able to compete only in a limited degree with the competition in this field, now

THEREFORE, BE IT RESOLVED, that a committee on Small Housing be appointed by the Executive Board to study the entire situation and make a report as to the desired method of procedure.

Upon motion made by Mr. Ebling and seconded by Mr. Schneider, the motion was adopted.

Mr. Ebling then stated that the committee had several more communications for which they did not have sufficient time to prepare resolutions. One was the recommendation to have more activity in the field of education, and the communication states that it is believed that this field offers the best possibility for acquainting the building public with the matter of architectural services. Thought should be given to ways and means to allocating or making available means to permit the establishment of a bureau. This, your committee suggested, should be referred to the present com-

mittee on education with certain recommendations.

An other communication urged us to go on record as approving the action of the A.I.A. in its investigation of the present building prices in the country as a whole. We would like to have that passed as a resolution.

Same was moved by Mr. Ebling and seconded by Mr. DeGelleke and adopted.

Another communication which the committee wished to have adopted as a resolution was that the Producers Council and other building material manufacturers who prepare and circulate catalogues among the architects be requested to have their catalogues carry the year of issue to assist the architects in determining whether or not the catalogues in their files are up to date.

Motion was offered by Mr. Ebling and seconded by Mr. Memmler and adopted.

There being no other new business to come before the convention the chairman asked for nominations for the 14 vacancies on the board.

The following were nominated as members of the Executive Board by the several districts of the State to represent them on the 1940 Executive Board. District No. 2, Emiel Klingler, Amery; District No. 3, Edward Wettengel, Appleton; District No. 4, C. Madsen, Stevens Point; District No. 5, Wallace Brown, Oshkosh; District No. 6, B. H. Knobla, Madison; District No. 7, Edmund Schrang, Milwaukee; and District No. 8, William Mickelsen, Racine. The seven district directors were duly elected.

The following members were nominated to fill the offices of the seven members of the Executive Board at large. Leigh Hunt, Walter Memmler, Henry Slaby, Edgar Berners, A. L. Seidenschwartz, Carl Ames, William Schneider, Mark Pfaller, Noel Ross Safford, Gregory Lefebvre, Herbert Ebling, Wm. Oppenhamer, Urban Peacock, Gerrit DeGelleke; the seven members receiving the greatest number of votes to be elected as Executive Board members at large.

The tellers reported that A. L. Seidenschwartz, Leigh Hunt, Noel Ross Safford, Gerrit DeGelleke, Walter Memmler, Gregory Lefebvre, and William Schneider were elected the 7 members of the Executive Board for the ensuing year.

The election of directors concluded the business of the convention and motion was adopted to adjourn. After the adjournment the newly elected Executive Board met to elect the officers for the coming year.

Officers elected are: William Mickelsen, President; Walter Memmler, First Vice President; Emiel Klingler, Second Vice President; A. L. Seidenschwartz, Secretary; and Gregory Lefebvre, Treasurer.

After the adjournment of the meeting the architects were driven to a delightful buffet luncheon served at the plant of the Pittsburgh Plate Glass Company where an inspection tour of the plant was made under the able guidance of several of the company's chemists.

Respectfully submitted,

ARTHUR L. SEIDENSCHWARTZ,

Secretary



## Putty

by  
PETER BRUST

The writer was caused serious concern several years ago by water leaking through the putty on freshly glazed windows. No one knew why, yet there evidently was a reason. This experience led to a thorough study of the subject on which there was nothing to be found in print.

The information in the following article was obtained from all available sources but principally from putty manufacturers and is herewith transmitted to the readers of THE WISCONSIN ARCHITECT.

Putty is a plastic compound made of a combination of chalk, whiting and oil. That in itself is quite simple but the demands made of putty are so numerous that many variations of that simple formula are necessary. Consequently, the chemistry of putty making has become very complex. The oldest formula for putty is whiting and linseed oil. This type of material, although very long lasting, has many short comings. It is very difficult to use because by nature linseed oil is tacky. After it is applied, it sets slowly. Because of these undesirable qualities, a variation of the oil content is absolutely necessary for average commercial use. If a blended putty oil is combined with the linseed oil, the tackiness is removed and speedier application is possible. The putty oils are not so well bound to the pigment and are consequently freer to be soaked into the wood. This causes an initial set to be apparent shortly after the putty has been applied. Painting therefore is possible within a couple of weeks after application.

Economy and demands for cheaper materials has caused most manufacturers to make three to four different combinations of oils. The best putty is usually the most expensive to buy but in the long run, is actually cheaper. This, of course, applies to anything you buy. If it is possible to use pure linseed oil putty and let it set firmly before painting you will have the best job. Since this is impossible in commercial use, select a putty that has some life in it and don't try to buy the cheapest. The cost of re-glazing a sash is far more costly than good putty. The impression should not be gained from this statement that all you have to do is buy expensive putty to get the perfect glazing job. Good putty, applied properly and given normal care after application, will adhere to both sash and glass and be thoroughly satisfactory for the life of the sash.

Putty, like any other compound with oil as an ingredient is affected somewhat by temperature changes. This physical reaction only occurs prior to the time the putty is applied to the sash and changes in temperature will not affect putty after it has set. Therefore, it is necessary that the manufacturer alter the formula of the putty to suit the season or section of the country to which the material is to be shipped. It is sometimes necessary, especially in spring and fall, to change the formula from day to day to insure the consumer a material that will be workable at all times.

Because of this variation in putty due to weather conditions it is possible that you may occasionally

open a drum which may seem too stiff or it may be too soft to work easily. A natural reaction to this is to assume that the putty is of poor quality and that a mistake has been made by the manufacturer. However, in almost every case it is simply due to an error in judgment on the part of the manufacturer, as to the probable temperature that will exist at the time the material is used. It is a comparatively easy matter to adjust the putty to the proper working consistency. For softening wood sash putty mix raw linseed oil thoroughly into the material until the proper consistency is secured. For stiffening use whiting. For softening steel sash putty mix gasoline (not Ethyl) and for stiffening use whiting.

As regards the working properties of a putty, no general statement can be made which is applicable to all putties. However, it does appear that a putty that is formulated for speed of application by the glazier may not be so durable as one that is not quite so easy in handling and speedy in applying.

Putty should not be applied to damp, dusty, or icy surfaces, the surfaces should be dry and then wiped clean with a cloth saturated with turpentine or mineral spirits before applying the putty. Putty should not be applied in cold weather (below 40 degrees F) or during damp or rainy weather.

Glass should be bedded in putty, tacked and then face puttied to insure a watertight job. After glass is puttied the sash may not be roughly handled or jarred until the putty has set, which takes about 48 hours.

Putty should not be painted until it is thoroughly set and hard. Too early painting forms an air-tight film over the surface of the putty, retarding its drying, and later may cause the surface of the paint to check. However, all putty should be painted for proper protection, it should not be left more than 2 months before painting. There are some special, quick-setting putties that must be painted within 1 week of exposure to the weather, to avoid deterioration of the putty.

Paint should be applied in a careful manner over the putty, and the paint coat should extend slightly beyond the edge of the putty on the glass so as to form a seal.

### APPLICATION ON WOOD SASH

The wood surfaces to which putty is applied must be primed to avoid excessive loss of oil from the putty through absorption. The ideal primer is one, which by its very nature will penetrate deeply into the wood and does not dry to a hard glazed surface. Quick drying primers such as shellac, thick paints and even boiled linseed oil oxidize so rapidly on the surface that penetration into the wood is very slight. Boiled linseed oil is not as bad as the others above mentioned.

The active compounds in the wood under these quick drying primers seek the surface and react upon the film that is ostensibly applied to protect the wood.

(Continued on page 8)



This reaction breaks down the surface coat and the putty applied to this coated surface is soon left without a bond; moisture works in under the putty and the disintegration sets in. An inspection of a putty complaint where the putty has been applied to a sash primed with a heavy white lead and oil paint demonstrated the above very clearly. If the putty can be removed in long strips, it will be noticed that the surface of the wood is chalky and that of the primer practically gone.

New wood sashes should be primed with either one coat of thin white lead linseed oil paint (100 pounds soft white lead, 4 gallons linseed oil,  $1\frac{3}{4}$  gallons turpentine, and 1 pint drier), or one coat of thin lead-zinc paint plus 1 quart of linseed oil and 1 pint of turpentine, or one coat of thin boiled linseed oil (1 quart of mineral spirits or turpentine to 1 gallon of boiled linseed oil). These coatings should be allowed to dry hard before applying the putty. The new or unpainted wood sashes should be primed on all surfaces.

Old wood sashes should be scraped, cleaned and primed before setting the glass. On old work all loose putty should be removed before applying new putty. It is very important that all surfaces should be dry and cleaned of dirt, loose paint, or putty.

#### APPLICATION ON STEEL SASH

With the advent of steel sash, the manufactures of putty were faced with an entirely new problem. Wood sash putty has been made to oxidize on the surface and have a portion of its oil absorbed by the wood. Here was something revolutionary for there was no absorption possible by the steel and regular wood sash putty would not set up. They realized that something had to be added to the putty to make up for this lack of absorption. They figured that a hardener would be best, so soon red lead, litharge and white lead came into common use. These materials accomplished in a measure what was needed, but they had many shortcomings. They dried and hardened slowly but firmly and after setting became so hard and brittle that many failures occurred. Like anything brittle, it cracked and fell out readily. Mr. John Armstrong, a progressive putty manufacturer was the first to attempt to overcome this thorn in the side of the steel window people. He figured that if putty could be made so that the excess of oil necessary to make it workable and heretofore absorbed by the sash could be in a form which would readily leave the putty after application, the remaining putty and oil would have an initial set and could proceed to dry naturally into a far less troublesome bulk. He finally accomplished this through the substitution of driers for the old hardeners. Now, practically every steel sash putty is made along this principle.

From the viewpoint of the putty manufacturer, there are two types of steel windows, one type that is puttied on the inside and commonly referred to as regular sidewall sash and another type that is puttied on the outside, known as casement sash. Each requires a different kind of putty as the different exposures demand. Steel sash putty and casement putty are now available. For best results always use the type of putty best suited for the job to be done.

#### ELASTIC GLAZING COMPOUND

Elastic glazing compound is a new type of glazing material. It works equally well on steel, wood, glass, stone, brick or marble. It is what the name implies — a compound for glazing purposes which remains permanently elastic. It develops a tough, leathery skin but remains elastic underneath. The skin is thoroughly weatherproof and is sufficiently strong to resist the average demands of any putty. It can be picked out, however, so it is not desirable for windows in schools and public buildings which are within reach of the curious. It is ideal for glazing where heavy condensation exists, where vibration is present or excessive temperature changes cause constant expansion and contraction. The problem of replacing broken glass is solved for years after the window is glazed. The compound can be readily cut out with a putty knife. The old chisel and hammer are no longer necessary, consequently the sash does not have to be hacked away to get the putty out. The skylight manufacturers have realized the worth of this better, more waterproof material. The majority of them are now using it. They even use it to seal the skylight flashings.

Elastic glazing compound is, of necessity, made of heavy oils and is harder to apply than regular putty. It has been estimated that it takes about 20% more labor to do a good job. The material itself is more expensive too, so the finished job must cost more, but this extra cost is well worth it. This is proven by the fact that many of the Industrial Organizations and Architects are specifying the use of this type of material.

#### PRIMELESS PUTTY

Primeless putty has been developed out of a demand by the sash and door companies for a material that will glaze readily, prime the sash and set up rapidly. This material was developed along with the high speed production and the lack of facilities of the sash and door people to warehouse the sash. Very often it is necessary to make, glaze and ship the sash all within one day. It is very easy to understand that the demands on primeless putty are very great and too often unreasonable. Consequently, we have a very definite negative reaction upon the part of the builders to the use of closed sash delivered from the mill. Once the bond that putty makes with the wood is broken, it can never be made again. This will show why there are so many failures because too often the sash is glazed in the morning, hammered into crates that afternoon, jostled on a truck to the freight house and rattled in transit to either a warehouse or a job. Primeless putty is good putty and if it is used intelligently will do everything for which it was intended. The negative reaction referred to above on the part of the buyers of millwork has caused many sash and door houses to go back to the old type of glazing where the sash is dipped in linseed oil or the rabbets brushed as it leaves the sticker. After this primer has been given a chance to dry, regular wood sash putty is applied and it is warehoused until the material has a chance to at least start its initial firm set.



## Correction

Due to a typographical error in the article "Modern Uses of Linoleum," in the October issue, one of the main features of the new linoleum products was misstated. The sentence read "It was pointed out that linoleum applied on concrete which is in contact with the ground is not practical." We wish to correct this misstatement by saying "It was pointed out that linoleum applied on concrete which is in contact with the ground is practical."

## November Board Meeting

The November Board meeting of the State Association will be held on November 25th at the Plankinton House in Milwaukee. Any matters needing the attention of the Board should be addressed to Arthur Seidenschwartz, 2104 N. 64th Street, Milwaukee.

## Annual A.T.A. Meeting

The Annual Meeting of the Wisconsin chapter of the American Institute of Architects will be held at the City Club in Milwaukee on November 29th at 12:15 P. M.

## Date Change

A change in the date of the monthly meetings, effective this month was announced at the close of the Convention. The meetings are to be held on the last Saturday of each month except during the months of July and August during which months they will be suspended.

## Exhibition Schedule

The schedule for the traveling exhibit has been completed and is as follows:

GREEN BAY	
At the Y.M.C.A.	Nov. 1 — Nov. 15
APPLETON	
At the Y.M.C.A.	Nov. 16 — Dec. 1
OSHKOSH	
At the Museum	Dec. 2 — Dec. 30
FOND DU LAC	
At the Library	Jan. 1 — Jan. 15
SHEBOYGAN	
At the Library	Jan. 16 — Feb. 1

## FORM FIT TRUSS . . .

A NEW TYPE OF SHORING  
FOR REINFORCED CONCRETE  
WALLS AND SLABS

EXPANSIBLE STEEL TRUSS CORP.

1119 N. Water St.

•

MArquette 0438

## Copper and its Uses

by

BURT CADDLE

*Secretary of Copper and Brass Research Association*

With the advent of another winter season, home owners again turn their attention to those parts of the home that afford protection against the elements.

Not the least of these is the roof to which building technicians are giving more and more attention, since no house is better than the materials that go to protect it.

The sale of Copper for roofing materials and Brass pipe and Copper tube for plumbing will this year be greatly in excess of the tonnage consumed during 1938.

When the historic Cathedrals of both the Old and the New World and the Temples of the Far East were constructed, their architects were most careful in selecting materials that would give centuries of satisfactory service. Many of these edifices were built more than 600 years ago and are still in a good state of preservation. Most of them will continue to withstand the attack of the elements for generations to come.

It is fitting that in the construction of these monumental structures copper, first metal of commerce, was used for roofings. The copper applied centuries ago is giving satisfactory service. Records show that perhaps the oldest copper roof in the world is that on Hildesheim Cathedral of Germany. Many portions of this roof are extant since 1320. That was some twenty years before the beginning of the One Hundred Years War and some 173 years before the discovery of America.

When selecting materials for a roof, it is good judgment to use copper for roofing, and particularly for flashings, gutters and down-spouts. The protection of the home from the elements — sun, sleet, snow and rain — depends on the serviceability of the roof. If metals that rust are used sooner or later leaks develop, oftentimes causing considerable damage to the interior and requiring costly repairs.

It is estimated that as many as 5,000 gallons or about 20 tons of water descend on the roof of an average home each year. All this water is conducted from the roof by gutters and downspouts. If they are rusted and pitted there is little protection afforded during heavy rainstorms.

In the past it has been the usual practice, wherever copper sheet metal work was to be used in building, to specify 16-ounce copper without special regard to the exposure to which it was to be subjected. Recent years have brought about the realization that conditions of usage and exposure vary, and it thus seems logical that the weight of copper sheet used should be governed, in some measure, by the type of service for which it will be employed. In suburban or rural locations copper lighter than 16-ounce has been advocated and is being used for sloping roofs of residences and for small roof areas. Even in such instances 16-

(Continued on page 10)



ounce copper is recommended for gutters and downspouts.

There is on the market today a number of new type copper roofs including standing seam and shingles. Considering the fact that these are rust-proof and corrosion-resistant and give a long life of satisfactory service, they are not expensive. In fact they compare favorably in price with commercial slate and other better roofing materials. These roofs have the corrosion resistant qualities of the heavier sheets but of course are not expected to give centuries of service when used on small structures.

The architectural division of Federal Housing Administration has approved these new types and builders or buyers of homes specifying this material can obtain approved mortgages from that Governmental department. These new type copper roofs are also approved by building and loan associations and by banks extending mortgages to home owners. Many of these roofs have already been subjected to the rigors of winter snows and sleet and to spring rains. They have withstood the attack of the elements without requiring costly repairs as is so frequently necessary when metals that will rust have been used.

Millions of dollars are spent by municipalities on reservoirs, on filtration plants and aqueducts to deliver pure, crystal clear water to pipes in the home. If these pipes are rusty, all the careful work at the source of supply will not prevent a reduced flow of discolored water at the faucets.

All the engineering resources and skill your community can muster are working to provide you with unpolluted water. The ultimate responsibility, however rests with you. Pure water delivered to your home will not run clear from the faucet if the pipe in the house is rusted. Good plumbing means good health and for that reason metals that cannot rust or become rust-clogged should be specified.

Brass pipe or copper tubing cannot rust and are resistant to corrosion. They should give satisfactory service, and a steady flow of healthful water. Yet these metals are not expensive. Brass pipe or copper tubing can be installed for both hot and cold water lines at only a little more expense than the best grade of rustable pipe. The United States Bureau of Standards has this to say about metals that will rust:

"All the common ferrous . . . materials will rust on exposure to air and moisture or water which has not been completely freed of its dissolved air. Under different conditions some . . . will rust less than others, but all will eventually rust."

Copper and Brass are nonferrous metals. They cannot rust. They resist corrosion. They will withstand the attack of time and the elements very well.

Where water conditions are extremely corrosive "Red Brass Pipe" (85-15) or Copper Tubing should be specified.

Every housewife knows the importance of having plenty of hot water in the home. It is almost as essential as having cold water available. Either automatic storage heaters or range boilers are employed. Where the former is used the fuel is gas, electricity or oil. The latter is used with any type of independent

water heating unit, including ranges and furnaces.

It is just as necessary to have either the automatic storage heater or range boiler made from copper or copper alloys as it is to have water lines made from brass or copper. If the storage tank or boiler is made from a ferrous metal it will rust. Hot water is more corrosive than cold water. If the tank or boiler rusts, the hot water when drawn in the kitchen, bathroom or laundry will have a reddish color. When you draw your bath you will find the water discolored. When you turn on the water in the kitchen or laundry you will discover it is not pure and clear.

No one likes to drink discolored water. Neither does the housewife want to see discolored water in her kitchen. But it is the laundry where most complaints come from when rust has discolored the water. Linen, lingerie and other articles when washed in discolored water will stain. Frequent washing in such water changes the color of white materials to a reddish hue.

There is available to homeowners today copper alloys that have the rust-proof qualities of copper and are as strong as steel. Many leading manufacturers have standardized on these alloys in the manufacture of their tanks. They are available in usual sizes. While the first cost is a little more than for ferrous ones, they will eventually pay for themselves for they last longer and are a preventive against red rusty water and its consequent repair bills.

Termites, a tropical insect, are destroying approximately \$50,000,000 worth of property annually throughout the country. As a result of this tremendous damage, builders and buyers of homes as well as lending institutions are giving a great deal of attention to protection against these insects.

The United States Government, through the Department of Agriculture, as well as many state Agriculture Departments, is conducting extensive research in an effort to stamp them out, just as they devised means of combating the Japanese beetle, and other coleopterous insects. So great has become the damage that several states are now considering legislation making it compulsory to protect buildings against their invasion.

The best known authorities on termites — their prevention and control — say that spraying affords only temporary relief. Copper or copper alloy shields between the foundation walls and the superimposed woodwork of buildings are the best known protection against these destroyers. These shields cover the top of the masonry and project straight out beyond each side of the wall with the edges flanged downward. Wood posts making contact with the ground are protected by being capped at the base with copper, which is extended upward to end in projecting shields at a point 18 inches above the ground. Pipes should also be shielded because the termite will build shelter tubes up to the exterior of the pipe enabling them to reach the woodwork.

A termite must have moisture to live. Once they gain entrance to a building and cannot get to the earth they quickly die. They cannot penetrate a home shielded properly with copper.

*(Continued in December Issue)*



- FOR RESIDENTIAL, PUBLIC BUILDING OR COMMERCIAL USE . .

WE MANUFACTURE FLOORING

of

MAPLE, BEECH, BIRCH AND WISCONSIN OAK

in

STRIP, HERRINGBONE AND ASSEMBLED BLOCK FORM

- We can furnish the above stock treated for moisture resistance if desired.

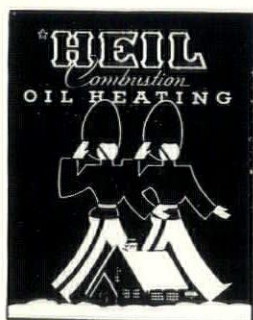
OUR MAPLE, BEECH and BIRCH flooring is guaranteed MFMA (*Maple Flooring Manufacturers Association*) grade and manufacture.

We are ready and anxious to give what advice we can in flooring problems to any architect who addresses us:

**HOLT HARDWOOD COMPANY** OCONTO, WISCONSIN

• PLANKINTON •

*House*  
MILWAUKEE



### Consider These Advantages of Heil Oil Heating Equipment:

1. Made in Milwaukee.
2. Built, and guaranteed by a long established, financially responsible manufacturer.
3. Sold and serviced (in Milwaukee County) by a direct factory organization.
4. A complete line of oil heating equipment for every type of service.
5. Thousands of satisfied users—Universal acceptance.

**THE HEIL CO.**

GENERAL OFFICES:  
3000 MONTANA ST., MILWAUKEE  
PHONE: MITCHELL 8000

DON'T FORGET!

BUY

AND

USE

CHRISTMAS SEALS

PROMPT SERVICE AND  
GOOD WORK. THIS IS  
OUR CREED



**MILWAUKEE BLUE PRINT  
& PHOTOSTAT CLUB**

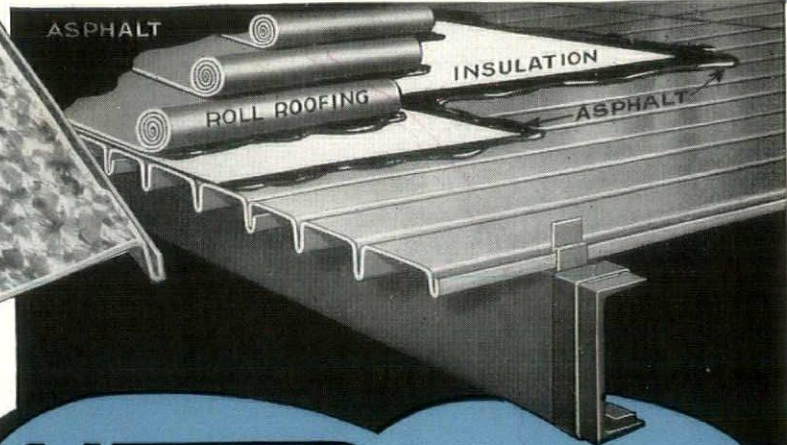
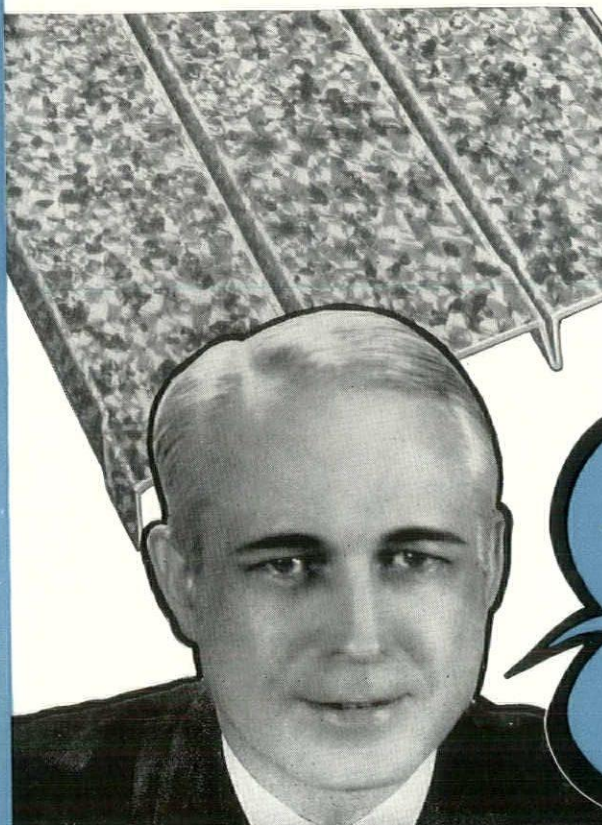
EUGENE DIETZGEN CO.  
F. A. OTTO, INC.  
FREDERICK POST CO.  
M. J. SCHMITT  
O. J. WALLBER & SON, INC.  
DAVID WHITE CO., INC.

PATRONIZE

YOUR

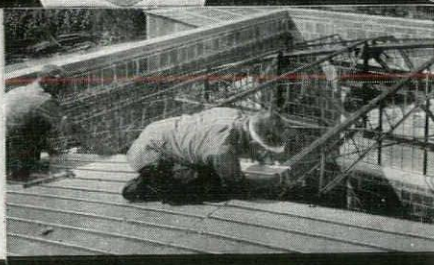
ADVERTISERS



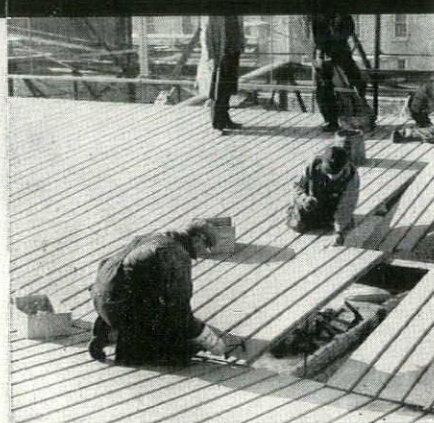


**MILCOR** Roof Deck  
offers all the advantages  
of *steel . . . plus speedy  
erection and low, over-all costs*

Attaching  
Purlin  
Clip



Fast  
application  
cuts costs



Quickly  
ready for  
roll roofing



**. . . and that means long-run  
satisfaction of your clients**

Where safety, permanence, and long-time economy are factors to be considered in your roof specifications, Milcor Steel Roof Deck offers you a practical, versatile material to help you do the best job for your clients.

This Milcor product — steadily growing in use on large and small buildings of all types — combines the permanence and fire-safety of steel with special Milcor construction features, for economy and speed in erection, and economy in maintenance.

Jobs go through on fast schedules with Milcor Deck. It is light in weight, easy to handle, and requires *relatively lighter and less costly supporting structure*. Easily attached — with clips or welding — to any structural member. Unique offset enables the erector to nest the sections in an amazingly short time, with the plates firmly interlocked.

Adaptable to any type of construction and to real insulation, with standard types of insulation board. Smooth deck provides a clean-cut appearance and longer life for roof covering. The roof stands for years as a tribute to your sound judgment in specifying Milcor.

Write today for your free copy of the Milcor Roof Deck Bulletin.

Unit of  
**MILCOR SYSTEM** of  
fireproof construction  
Milcor here uses the word "system" in its true sense — not to signify a limited, inflexible set-up applicable only under certain conditions, but to represent so great a range of individual products, types, weights, metals, etc., that a complete, coordinated metal backbone can be designed to suit any condition of fireproof construction — all with Milcor products engineered to work together.

F-68

**MILCOR STEEL COMPANY**  
MILWAUKEE, WISCONSIN CANTON, OHIO  
CHICAGO, ILL., KANSAS CITY, MO., LA CROSSE, WIS., ATLANTA, GA.,  
NEW YORK, N. Y., ROCHESTER, N. Y., BALTIMORE, MD.  
Sales Offices: Minneapolis, Minn., Little Rock, Ark., Dallas, Tex.,  
Denver, Colo., Washington, D. C., Boston, Mass.